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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/581,602

08/18/2000

Manabu Oumi

S004-4005(PC

9810

7590

08/26/2005

Bruce L Adams
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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/581,602

Applicant(s)

OUMI ET AL.

Examiner

Aristotelis M. Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-52 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) 1 is/are allowed.
6) ☒ Claim(s) 36-52 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/16/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Applicants' response of 12/16/04 has been considered with the following results.

Information Disclosure Statement

The IDS of 9/16/04 has been received and made of record.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 36-39, 41-43, 45-47, 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-112075 further considered with Hajjar.

The following analysis is made:

~~Claim 16~~ *Claim 36*

Jp 10-112075 & Hajjar

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~~38~~. An information reproducing apparatus
comprising:

See title/abstract/ and
the MAT of the JP document

a light source for generating
linearly polarized light;

see element 27 and parag.s
38- 45 for instance with respect to
laser source 27

a medium having a linear mark;

medium is present

an optical head disposed between the light source
and the medium, the optical head having a fine aperture;

element 31

a polarized light control means for controlling the
linearly polarized light generated by the light source to pass
through the fine aperture of the optical head to generate
near-field light having a preselected polarization direction
and to irradiate the linear mark of the medium with the near-
field light so that the preselected polarization direction of
the near-field light is orthogonal to a longitudinal axis of
the linear mark; and

see description of
40-46
and Hajjar

a detector for detecting light scattered by the
linear mark irradiated with the near-field light.

detector elements
Present.

In the above analysis, the JP MAT (machine assisted translation) describes an optical medium and system for reproducing/recording information thereon providing for multi-values predicated upon orientation of the polarization direction of the incoming light beam. See the description of the MAT starting at paragraph 40 for instance. Furthermore, the use of the wave rotating plate is also found.

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Hence the examiner concludes that the reference provides for the above noted elements with the exception of a clear depiction of a "near field" light. Although the reference uses appropriate optical elements to generate beam spots, there is no identification of such as being "near-field" beam.

The Hajjar reference, teaches in this environment not only the polarization rotation, but also coupling such a capability with "near-field" optical elements in order to increase the recording density – see for instance the abstract.

It would have been obvious to modify the base system of JP 10-112075 with the above additional "near-field" ability, motivation is as discussed to increase the recording density of the record medium.

The limitations of claim 45 closely parallel claim 36 and are met for the same analysis as stated above.

With respect to claims 37 & 38,42,46, such an element is considered present in the overall combination of references, i.e., appropriate signal processing element for the inherent ability of processing the intensity of the reflected/detected signal.

With respect claims 39,43,47 the information data is the data recorded.

With respect to claim 41, this claim follows/parallels the limitations of claim 36 and has the additional limitation of the medium "having a plurality of linear marks extending in different directions from one another". This is considered met by the above system, not the various directions of the linear marks.

The method limitations of claim 49 are met when the above system operates, are as the method limitations of claims 50 and 51.

2. Claims 40,44,48,52 are is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to the claims above, and further in view of either EP 552887 or 376673.

Either of these documents describes optical systems wherein the ability of having both servo and data information at (various) different directions is further taught – see the abstracts in both of the documents.

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It would have been obvious to modify the base system as stated above with the additional teaching from either of these documents, motivation is to permit the system to distinguish between the servo signal(s) and the data signals.

Conclusion

The Kino reference is cited as illustrative of a near-field system having various shapes for the emitting beam.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Because copies of the above noted EP documents recited in paragraph 2 and the JP document relied upon in paragraph 1 were cited by applicant in the filing of his application, no copies are being sent herein.

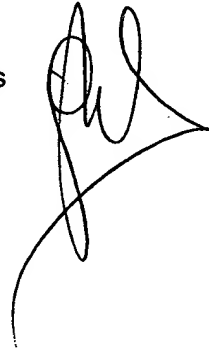
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
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A handwritten signature in black ink, appearing to be 'A. Psitos', written over a horizontal line.

AMP